

## PATENT ABSTRACTS OF JAPAN

(11)Publication number : **02-233608**

(43)Date of publication of application : **17.09.1990**

(51)Int.Cl.

**A61K 7/18**

(21)Application number : **02-015960**

(71)Applicant : **UNILEVER NV**

(22)Date of filing : **25.01.1990**

(72)Inventor : **RAVEN STEPHEN J**

(30)Priority

Priority number : **89 8901587** Priority date : **25.01.1989** Priority country : **GB**

### (54) TOOTHPASTE

(57)Abstract:

PURPOSE: To prepare a stable toothpaste, comprising a finely divided particulate abrasive cleaning agent dispersed in the liquid phase, an alkaline trimetaphosphate and a water-soluble fluoride and containing the alkali trimetaphosphate present in a partially insoluble form in the liquid phase.

CONSTITUTION: This toothpaste comprises a finely divided abrasive cleaning agent stably dispersed in the liquid phase, an alkali trimetaphosphate (TMP salt) and a water-soluble fluoride and contains the alkali trimetaphosphate present in a partially insoluble form in the liquid phase (preferably at 0% ratio of the TMP salt dissolved in the liquid phase). The toothpaste is capable of sustaining anticarious effects due to no loss of the water-soluble fluoride and the TMP during the storage without causing chemical interaction between the fluoride ions and TMP ions. At least 40% glycerol or at least 50% sorbitol syrup is formulated as a humectant in the liquid phase with the toothpaste.